

## WESTERN REDCEDAR SERIES

*Thuja plicata*

THPL

Diane E. White

The Western Redcedar Series has both an interior range and a coastal range in western North America. The interior range includes the north half of Idaho, fringes of western Montana west of the continental divide, and the southeastern corner of British Columbia. The coast range extends further, both north and south. It begins at the southern-most tip of southeastern Alaska, and continues through western Washington and Oregon west of the Cascade Mountain crest. In southwestern Oregon, the Series occurs on the Cottage Grove, North Umpqua, and Diamond Lake Ranger Districts, Umpqua National Forest.

In southwestern Oregon, the Western Redcedar Series nearly always has a major component of western hemlock. This Series occurs in areas that average 48 F in temperature and 64 inches in rainfall.

The Western Redcedar Series in southwestern Oregon is represented by one plant association, the Western Redcedar/Dwarf Oregongrape/Western Sword-fern Association.

The relationship of draft and final plant associations in the Western Redcedar Series is shown below. The draft associations are listed, with the final associations below each, in order of most to least common, with the percentage of plots that make up each association.

THPL/RHMA3/LIBOL (N=2)

TSHE-THPL/RHMA3 (50%)

TSHE/GASH/POMU-SWO (50%)

THPL/WHMO/ANDE (N=7)

THPL/BENE2/POMU (57%)

TSHE/GASH-RHMA3-SWO (14%)

PSME/ACCI-BENE2 (14%)

ABCO/RHMA3-BENE2 (14%)

## THPL 2

### WESTERN REDCEDAR/DWARF OREGONGRAPE/WESTERN SWORD-FERN

*Thuja plicata*/*Berberis nervosa*/*Polystichum munitum*

THPL/BENE2/POMU (N=7; FS=7)

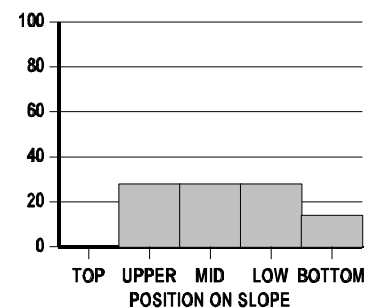
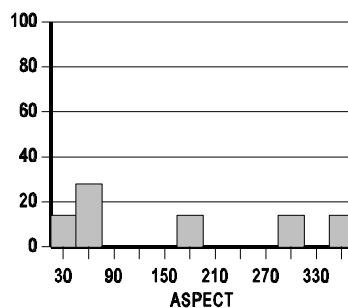
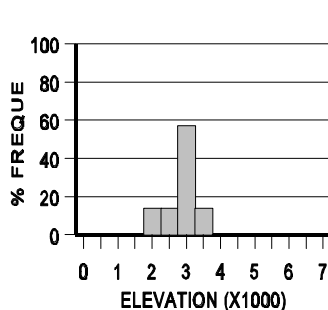


Distribution. This Association occurs on the Cottage Grove, North Umpqua, and Diamond Lake Ranger Districts, Umpqua National Forest and probably the Roseburg District, Bureau of Land Management.

Distinguishing Characteristics. This Association occurs at low to intermediate elevations in moist areas.

Soils. Parent material is primarily basalt, with infrequent occurrences on breccia and rhyolite. Soil data are not available.

Environment. This Association averages 2970 feet in elevation and aspect is predominantly north and east. Slope averages 37 percent and ranges between 5 and 52 percent. This Association rarely occurs on ridge top slope positions.



Vegetation Composition and Structure. Total species richness is very high compared with associations in the Western Hemlock Series, and averages 36. The overstory is dominated by Douglas-fir, while western hemlock and western redcedar are common. Western redcedar is dominant in the understory. Western hemlock is present, but at lower covers. Small amounts of Pacific yew are common. Hardwoods may be abundant; vine maple, for example, is frequently encountered and may be dense in some areas. Bigleaf maple, golden chinquapin, and Pacific dogwood are common. Dwarf Oregongrape, salal, and Pacific rhododendron are present in the shrub layer. Any of these species can be dense in an area. Red huckleberry is a frequent associate. Western sword-fern, three-leaf anemone, and Oregon fairybell are consistently present in the herb/grass layer, but at low covers. Moss cover is very high compared with plant associations in the Western Hemlock Series, averaging 42 percent.

Upper layer tree cover is high compared with plant associations in the Western Hemlock Series, averaging 75 percent. Mid-layer tree cover is intermediate averaging 60 percent cover, and lower layer tree cover is very high, averaging 58 percent. High shrub cover averages 23 percent and low shrub cover is dense, averaging 64 percent. Herb/grass cover is intermediate, averaging 24 percent.

Common name	Code	Constancy	Cover	Avg. Richness
<u>Overstory trees</u>				3
Douglas-fir	PSME	100	53	
Western hemlock	TSHE	71	5	
<u>Understory trees</u>				8
Western redcedar	THPL	100	26	
Western hemlock	TSHE	100	12	
Douglas-fir	PSME	86	3	
White fir	ABCO	71	4	
<u>Shrubs</u>				11
Dwarf Oregongrape	BENE2	100	26	
Salal	GASH	100	26	
Red huckleberry	VAPA	86	3	
Pacific rhododendron	RHMA3	71	18	
<u>Herbs</u>				19
Western sword-fern	POMU	100	6	
Three-leaf anemone	ANDE3	100	1	
Oregon fairybell	DIHOO	100	1	
Western twinflower	LIBOL	86	9	
Whipplevine	WHMO	86	4	
Western starflower	TRLA6	86	1	
White trillium	TROV2	86	1	